```
FILE 'HOME' ENTERED AT 11:57:51 ON 13 FEB 2008

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    0.21       0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
      AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
      CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
      DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 11:58:24 ON 13 FEB 2008

69 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s cholesterol (s) (ldl or (low (2a) density))
       6242   FILE ADISCTI
        259   FILE ADISINSIGHT
       1131   FILE ADISNEWS
       2740   FILE AGRICOLA
        216   FILE ANABSTR
         30   FILE ANTE
          3   FILE AQUALINE
         96   FILE AQUASCI
        295   FILE BIOENG
      31749   FILE BIOSIS
        320   FILE BIOTECHABS
        320   FILE BIOTECHDS
       3706   FILE BIOTECHNO
      10373   FILE CABA
      20984   FILE CAPLUS
         45   FILE CEABA-VTB
        228   FILE CIN
        233   FILE CONFSCI
          7   FILE CROPU
        379   FILE DDFB
       7149   FILE DDFU
      22141   FILE DGENE
       1143   FILE DISSABS
        379   FILE DRUGB
      12054   FILE DRUGU
        361   FILE EMBAL
      38437   FILE EMBASE
      12750   FILE ESBIOBASE
  30 FILES SEARCHED...
          4   FILE FOMAD
       2422   FILE FROSTI
       1495   FILE FSTA
        301   FILE GENBANK
        112   FILE HEALSAFE
       1485   FILE IFIPAT
        197   FILE IMSDRUGNEWS
        230   FILE IMSPRODUCT
        155   FILE IMSRESEARCH
         16   FILE KOSMET
       1930   FILE LIFESCI
      34720   FILE MEDLINE
         74   FILE NTIS
```

```
       177   FILE NUTRACEUT
        13   FILE OCEAN
     14582   FILE PASCAL
       187   FILE PHAR
       317   FILE PHARMAML
         8   FILE PHIC
       667   FILE PHIN
      3895   FILE PROMT
       702   FILE PROUSDDR
         2   FILE RDISCLOSURE
  56 FILES SEARCHED...
     23383   FILE SCISEARCH
     11142   FILE TOXCENTER
       578   FILE USGENE
      9431   FILE USPATFULL
         3   FILE USPATOLD
      1461   FILE USPAT2
         1   FILE VETB
        30   FILE VETU
         4   FILE WATER
      1964   FILE WPIDS
        27   FILE WPIFV
      1964   FILE WPINDEX

  63 FILES HAVE ONE OR MORE ANSWERS,   69 FILES SEARCHED IN STNINDEX

L1   QUE CHOLESTEROL (S) (LDL OR (LOW (2A) DENSITY))

=> s L1 (s) (total (2a) cholesterol)
      4029   FILE ADISCTI
       143   FILE ADISINSIGHT
       576   FILE ADISNEWS
      1214   FILE AGRICOLA
        51   FILE ANABSTR
        12   FILE ANTE
        46   FILE AQUASCI
        82   FILE BIOENG
      9179   FILE BIOSIS
        66   FILE BIOTECHABS
        66   FILE BIOTECHDS
       775   FILE BIOTECHNO
      5091   FILE CABA
      6865   FILE CAPLUS
         6   FILE CEABA-VTB
        49   FILE CIN
         9   FILE CONFSCI
         3   FILE CROPU
         9   FILE DDFB
      3142   FILE DDFU
       764   FILE DGENE
  23 FILES SEARCHED...
       447   FILE DISSABS
         9   FILE DRUGB
      6658   FILE DRUGU
       146   FILE EMBAL
     10963   FILE EMBASE
      4998   FILE ESBIOBASE
       889   FILE FROSTI
       792   FILE FSTA
        49   FILE HEALSAFE
       348   FILE IFIPAT
```

```
        66   FILE IMSDRUGNEWS
       200   FILE IMSPRODUCT
        70   FILE IMSRESEARCH
         6   FILE KOSMET
       464   FILE LIFESCI
     11251   FILE MEDLINE
        16   FILE NTIS
  44 FILES SEARCHED...
        56   FILE NUTRACEUT
         5   FILE OCEAN
      5750   FILE PASCAL
        65   FILE PHAR
        72   FILE PHARMAML
       202   FILE PHIN
      1090   FILE PROMT
       200   FILE PROUSDDR
      8350   FILE SCISEARCH
      4164   FILE TOXCENTER
        48   FILE USGENE
      3151   FILE USPATFULL
         1   FILE USPATOLD
       439   FILE USPAT2
        12   FILE VETU
       507   FILE WPIDS
  67 FILES SEARCHED...
         4   FILE WPIFV
       507   FILE WPINDEX

  56 FILES HAVE ONE OR MORE ANSWERS,   69 FILES SEARCHED IN STNINDEX

L2   QUE L1 (S) (TOTAL (2A) CHOLESTEROL)

=> s L2 (s) (esterase (s) (oxidase or dehydrogenase))
         3   FILE ANABSTR
         2   FILE BIOTECHABS
         2   FILE BIOTECHDS
         3   FILE BIOTECHNO
         2   FILE CABA
  22 FILES SEARCHED...
         3   FILE ESBIOBASE
         2   FILE IFIPAT
  45 FILES SEARCHED...
         3   FILE PASCAL
        39   FILE USPATFULL
         3   FILE USPAT2
  66 FILES SEARCHED...
         5   FILE WPIDS
         5   FILE WPINDEX

  12 FILES HAVE ONE OR MORE ANSWERS,   69 FILES SEARCHED IN STNINDEX

L3   QUE L2 (S) (ESTERASE (S) (OXIDASE OR DEHYDROGENASE))

=> d rank'
DISPLAY L# IS NOT VALID IN STNINDEX
Answer set was created in a file.  Enter DISPLAY HISTORY to see where
the answer set was created.  Use the File command to change to that
file, then display the answer.

=> d rank
F1          39   USPATFULL
```

```
F2            5   WPIDS
F3            5   WPINDEX
F4            3   ANABSTR
F5            3   BIOTECHNO
F6            3   ESBIOBASE
F7            3   PASCAL
F8            3   USPAT2
F9            2   BIOTECHABS
F10           2   BIOTECHDS
F11           2   CABA
F12           2   IFIPAT


=> fil f2-6 and f8-12
'AND' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):end

=> fil f2-6, f8-12
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      9.75       9.96

FILE 'WPIDS' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'ANABSTR' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (c) 2008 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'BIOTECHNO' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'USPAT2' ENTERED AT 12:07:21 ON 13 FEB 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'CABA' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 CAB INTERNATIONAL (CABI)

FILE 'IFIPAT' ENTERED AT 12:07:21 ON 13 FEB 2008
COPYRIGHT (C) 2008 IFI CLAIMS(R) Patent Services (IFI)

=> s L3
L4          23 L3

=> dup rem L4
PROCESSING COMPLETED FOR L4
L5           17 DUP REM L4 (6 DUPLICATES REMOVED)
```

```
=> s L5 not py>2003
L6             7 L5 NOT PY>2003

=> d L6 ibib abs 1-7

L6   ANSWER 1 OF 7  ANABSTR  COPYRIGHT  2008 RSC on STN
AB   We have used the AT-cut quartz crystal sensor to measure in real-time the
     total cholesterol concentration in buffer and serum,
     using the trienzyme system of cholesterol esterase
     (ChE), cholesterol oxidase (ChOx) and horseradish
     peroxidase (HRP). The hydrogen peroxide produced from the ChE-ChOx
     reaction oxidizes diaminobenzidine (DAB), in the presence of HRP. The
     response of the sensor to cholesterol is optimal in the presence
     of 0.1 % (v/v) Triton X-100 at 0.2 iu/ml ChOx, and 1 iu/ml ChE A response
     is obtained in less than 25 min. Using the optimal concentrations of the
     reagents, the linear range for free cholesterol and low
     density lipoprotein (LDL) cholesterol
     determination was between 50 and 300μM, and 25 and 400μM,
     respectively. It was found that the concentration of high density
     lipoprotein (HDL) cholesterol could not be determined because it
     solubilized the oxidized DAB, leading to poor adsorption at the crystal
     surface. We obtained a response to the use of cholesterol in
     serum at 300μM, demonstrating that this biosensor could be used for
     cholesterol determination in clinical samples.

L6   ANSWER 2 OF 7  ANABSTR  COPYRIGHT  2008 RSC on STN
AB   A method to evaluate the free and total cholesterol in
     human serum, bile and gallstone extract using an enzyme thermistor
     (ET)-based flow injection analysis (FIA) is presented. The
     cholesterol in high-density (HDL-C) and low
     density lipoprotein (LDL-C) have also been evaluated. A
     heparin functionalized Sepharose column was employed for the isolation of
     HDL and LDL fractions from serum. The estimation of
     cholesterol and its esters was based on their reaction with
     cholesterol oxidase (CO), cholesterol
     esterase (CE) and catalase (CAT). Three different enzyme columns,
     i.e. co-immobilized CO/CAT (column A), only CE (column B) and
     co-immobilized CO/CE/CAT (column C) were prepared by cross-linking the
     enzymes on glass beads using glutaraldehyde. Column A was used for
     estimating free cholesterol and column C was used for estimating
     total cholesterol (cholesterol plus esterified
     cholesterol). Column B was used as a pre-column which could be
     switched in or out in conjunction with column A for the estimation of
     total or free cholesterol, respectively. The calibration
     graphs were linear from 1-8mM and 0.25-4mM for free and total
     cholesterol, respectively. RSD was <4% for more than 2000 assays
     with the ET device. The assay time was .apprx.4 min/assay. The
     cholesterol estimations on the ET correlated well with similar
     estimations using a commercially available cholesterol
     diagnostic kit.

L6   ANSWER 3 OF 7  BIOTECHNO  COPYRIGHT 2008 Elsevier Science B.V. on STN
ACCESSION NUMBER:        2002:35177148   BIOTECHNO  <<LOGINID::20080213>>
TITLE:                   Analysis method for lipoproteins by high-performance
                         liquid chromatography with sulfopropyl-ligand column
                         and magnesium ion-containing eluents
AUTHOR:                  Hirowatari Y.; Kurosawa H.; Yoshida H.; Doumitu K.-I.;
                         Tada N.
CORPORATE SOURCE:        Y. Hirowatari, Scientific Instruments Division, TOSOH
                         Corp., 2743-1 Hayakawa, Ayase-shi, Kanagawa 252-1123,
                         Japan.
```

E-mail: hirowata@tosoh.co.jp
SOURCE: Analytical Biochemistry, (15 OCT 2002), 308/2 (336-342), 24 reference(s)
CODEN: ANBCA2 ISSN: 0003-2697
PUBLISHER ITEM IDENT.: S000326970200266X
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2002:35177148 BIOTECHNO <<LOGINID::20080213>>
AB We have developed a new analysis method for lipoproteins in serum by high-performance liquid chromatography using a sulfopropyl-ligand column with eluents containing magnesium nitrate. The magnesium ion anchors lipoproteins to the ligands on the column gel. Lipoproteins are eluted from the column with a magnesium nitrate concentration gradient and detected by postcolumn reaction using a reagent containing cholesterol esterase and cholesterol oxidase. High-density lipoprotein, low-density lipoprotein, and very-low-density lipoprotein were eluted in order from the column. The within-assay and between-assay coefficients of variation for cholesterol concentration in lipoproteins were 1.1-3.7 and 1.3-5.8%, respectively. The correlation coefficients between the values of total cholesterol, high-density lipoprotein cholesterol, and low-density lipoprotein cholesterol obtained by the new method and those obtained by an enzymatic method using an automated chemical analyzer were 0.940, 0.979, and 0.909, respectively. The new method was successfully applied to the analysis of plasma lipoproteins of patients with hyperlipidemia. .COPYRGT. 2002 Elsevier Science (USA).

L6 ANSWER 4 OF 7 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2000-08277 BIOTECHDS <<LOGINID::20080213>>
TITLE: Methods for fractional quantification of cholesterol in lipoproteins in biological samples such as serum which is applicable by simple automatic procedure, useful for clinical diagnosis;
cholesterol quantification method in low density and high density lipoprotein using cholesterol-esterase, cholesterol-oxidase and cholesterol-dehydrogenase for diagnosis
AUTHOR: Sugiuchi H
PATENT ASSIGNEE: Kyowa-Medex
LOCATION: Tokyo, Japan.
PATENT INFO: WO 2000017388 30 Mar 2000
APPLICATION INFO: WO 1999-P 47128 30 Jul 1999
PRIORITY INFO: JP 1998-264367 18 Sep 1998
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2000-283609 [24]
AN 2000-08277 BIOTECHDS <<LOGINID::20080213>>
AB A method for quantifying low density and/or high density lipoproteins (LDL and HDL, respectively) cholesterol in a biological sample, which involves obtaining a sample, mixing it with cholesterol-esterase (EC-3.1.1.13), cholesterol-oxidase (EC-1.1.3.6) or cholesterol-dehydrogenase and then reaction the cholesterol with its specific cholesterol enzyme in the presence of a reagent for generating hydrogen peroxide or reduced co-enzyme, is new. Also claimed are: a method for fractional quantification of HDL cholesterol and total

cholesterol in a biological sample; a reagent for the reaction of cholesterol in all lipoproteins which contains a surfactant that can dissolve the lipoprotein; a quantification reagent for LDL cholesterol which consists of a cholesterol enzyme and a reagent to act on the LDL cholesterol-specific cholesterol enzyme; a reagent kit for the fractional quantification of HDL and LDL cholesterol; and a reagent kit for the fractional quantification of HDL and total cholesterol. The above may be useful for the clinical diagnosis of diseases related to high cholesterol levels in lipoproteins, such as arteriosclerosis. (46pp)

L6 ANSWER 5 OF 7 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
ACCESSION NUMBER: 1988-07462 BIOTECHDS <<LOGINID::20080213>>
TITLE: Specific measurement of high density lipoprotein cholesterol in serum;
using cholesterol-esterase and cholesterol-oxidase
PATENT ASSIGNEE: Boehr.Mannheim
PATENT INFO: EP 265933 4 May 1988
APPLICATION INFO: EP 1987-115841 28 Oct 1987
PRIORITY INFO: DE 1986-636851 29 Oct 1986
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 1988-121051 [18]
AN 1988-07462 BIOTECHDS <<LOGINID::20080213>>
AB Specific determination of high density lipoprotein (HDL) cholesterol in the presence of the low density lipoprotein-fraction of serum lipoproteins comprises treatment with cholesterol-esterase (CE, EC-3.1.1.13) to release cholesterol, which is oxidized with cholesterol-oxidase (CO, EC-1.1.3.6) and O2 to form H2O2, the kinetics of formation being measured. The measurement is taken 2-15 min after the start of the oxidation reaction at 20-40 deg, especially 25-37 deg, for a predetermined time interval. During measurement the concentrations of CE, CO, bile acid surfactant and nonionic surfactant are kept at 0.05-30 u/ml, 0.1-50 u/ml, 1-20 mM (especially 1.5-8 mM) and 0.1-10 g/l (especially 0.4-4.0 g/l), respectively and the pH is 5-9. The reagent which supplies the specified concentrations of components, the pH 5-9 buffer and the H2O2 measuring system are new. The HDL component is measured with a simple reagent in a single step and the sample can also be used for measurement of total cholesterol. The nonionic detergent, especially a polyethyleneoxy compound, is added 1-14 min before measurement, especially 3-10 min after the start of oxidation. (16pp)

L6 ANSWER 6 OF 7 CABA COPYRIGHT 2008 CABI on STN
ACCESSION NUMBER: 97:148220 CABA <<LOGINID::20080213>>
DOCUMENT NUMBER: 19971411415
TITLE: Clinical efficacy of the direct assay method using polymers for serum high density lipoprotein cholesterol
AUTHOR: Shirai, K.; Nema, T.; Hiroh, Y.; Itoh, Y.; Miyashita, Y.; Watanabe, H.
CORPORATE SOURCE: Clinical Laboratory Medicine, Sakura Hospital, Toho University School of Medicine, Sakura 285, Japan.
SOURCE: Journal of Clinical Laboratory Analysis, (1997) Vol. 11, No. 2, pp. 82-86. 9 ref.
ISSN: 0887-8013
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Dec 1997

Last Updated on STN: 11 Dec 1997

AB LDL and VLDL were coated with polymers and polyanions to block cholesterol esterase and cholesterol oxidase. The reduction of these enzymes for HDL cholesterol was enhanced with a detergent, and HDL cholesterol was selectively measured. Within-run (n=3, 20 times) and between-run (n=3, 7 days) CVs were <2%. The repeated freezing and thawing (4 times) of 3 distinct sera resulted in no changes in HDL cholesterol values. Additions of lipid emulsion (triglyceride 100 mg/100 ml) and free bilirubin (20 mg/100 ml) had no effect. Linearity was found up to 300 mg/100 ml. Increases in HDL cholesterol values by the addition of VLDL (total cholesterol (TC) 300 mg/100 ml) or LDL (TC 300 mg/100 ml) to the tested sera were <0.5%. The correlation coefficient of the new method with a precipitation method was 0.995 (n=64). HDL-C values for patients with hyperlipaemia (Type IIa, IIb, or III, IV, and V) by this method were comparable with those obtained by the precipitation method. It is concluded that the new method meets the requirements for accuracy, precision and ease of handling numerous samples.

L6 ANSWER 7 OF 7 IFIPAT COPYRIGHT 2008 IFI on STN

AN 02571493 IFIPAT;IFIUDB;IFICDB <<LOGINID::20080213>>

TITLE: METHOD FOR DETERMINING THE RELATIVE AMOUNTS OF ALL CHOLESTEROL-CONTAINING LIPOPROTEINS IN BODY FLUIDS

INVENTOR(S): Aufenanger, Johannes, Hirschberg, DE

PATENT ASSIGNEE(S): ''Immuno'' Aktiengesellschaft fur chemisch-medizinische Produkte, Vienna, AT

PRIMARY EXAMINER: Fleisher, Mindy B

AGENT: Sterne, Kessler, Goldstein & Fox

	NUMBER	PK	DATE
PATENT INFORMATION:	US 5385828	A	19950131
	(CITED IN 005 LATER PATENTS)		
APPLICATION INFORMATION:	US 1992-981992		19921124
EXPIRATION DATE:	31 Jan 2012		

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
CONTINUATION OF:	US 1989-359800	19890601	ABANDONED
FAMILY INFORMATION:	US 5385828	19950131	
DOCUMENT TYPE:	Utility		
	REASSIGNED		
	EXPIRED		
	CERTIFICATE OF CORRECTION		
CORRECTION DATE:	31 Oct 1995		
FILE SEGMENT:	CHEMICAL		
	GRANTED		
ENTRY DATE:	Entered STN: 7 Feb 1995		
	Last Updated on STN: 21 Jul 1997		

MICROFILM REEL NO: 010133 FRAME NO: 0259

NUMBER OF CLAIMS: 29

AB The invention refers to a method for determining the relative amounts of all cholesterol-containing lipoproteins in body fluids comprising electrophoretically separating the lipoproteins of an aliquot of body fluid on a thin layer carrier matrix, incubating the carrier matrix, containing the separated lipoproteins with cholesterol esterase and cholesterol dehydrogenase, forming a provable complex, and determining the relative amounts of the different lipoprotein classes2. The new

method makes it possible to simultaneously determine HDL-, LDL-, VLDL- and LP (X)cholesterol in body fluids with a high accuracy even at small concentrations. The thin layer matrices obtained electrophoretically, are very easy to handle and to record.

CLMN 29

=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	42.30	52.26

STN INTERNATIONAL LOGOFF AT 12:08:30 ON 13 FEB 2008